

RemarksDrawing objection under 37 CFR 1.83(a)

The Examiner objects to Figure 3 stating, in part, "flow sensor means and mass flow rate measurement means must be shown or the features(s) canceled from the claim(s)."

"Flow sensor means" and "mass flow rate measurement means" have been canceled from the claims as suggested by the Examiner.

Claim Rejections under 35 USC §102

Claims 1, 2, 4 and 5 stand rejected as anticipated by Yeh (US 4,932,788).

The claims have been amended to clarify differences between the present invention and the cited reference. The amendments are clarifying only and no new matter is added.

Temperature sensor means (8) in Yeh is not provided *centrally in* the inlet flow path, nor is temperature sensor means (11) provided *centrally in* the outlet flow path. Yeh's temperature sensors are "preferably thermistors of the thin-band type *placed around* the pipe carrying the sample stream;" see column 5, lines 10 – 13 of Yeh [emphasis added].

The temperature sensors in Yeh are placed as in Figure 1 of the present invention and the undesirability of such an arrangement is emphasized at the first through third lines of the second paragraph on page five of the specification.

The placement of temperature sensors in the flow paths in the present invention is emphasized at the sixth line of the fifth paragraph on page five and at the third line of the first paragraph on page six of the specification.

Claim 1 has been amended and claim 4 has been canceled to clarify the placement of temperature sensors. Claim 2 is dependent upon claim 1; therefore, the amendment to claim 1 addresses the issue for claim 2.

Claim 5 already requires centrally located temperature sensors. Therefore the rejection of claim 5 under 35 USC §102 is respectfully traversed for at least the reasons stated above.

Claim Rejections under 35 USC §103(a)

Claim 3 stands rejected as unpatentable over Yeh (US 4,932,788) in view of Viegas (US 5,598,709).

Applicant respectfully traverses the rejection of claim 3 for at least the following reasons.

According to MPEP 2143.01 there must be some suggestion or motivation to modify the references in order to establish a *prima facie* case of obviousness.

There is no motivation to modify the references because the use of helical coils in Yeh would not make Yeh's invention more compact. Therefore the "advantageous compactness" of Viegas cited by the Examiner would not be achieved.

In Viegas, the phrase, "to more clearly indicate the flow patterns" is a statement about why Viegas' Figure 1 is drawn schematically rather than as a mechanical illustration. It is not a motivation for including helical coils in a design.

Furthermore, Viegas teaches coils, not diversion fins. Coils are conventional and imply a helical wrapping up of standard tubing. Diversion fins are distinct from, and superior to, coils at least because they eliminate unnecessary gaps between coils and accommodate other than circular cross sections.

Conclusion

In view of the foregoing amendments and remarks, reconsideration and withdrawal of the rejection of claims 1, 2, 3 and 5 are respectfully requested. Moreover, it is submitted that claims 1, 2, 3 and 5 are now in condition for allowance and such a Notice is respectfully solicited.

Respectfully submitted,

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In the drawings:

Please replace Figure 1 with Figure 1 attached herewith. The term "Prior Art" was inadvertently omitted in the original figure. It has been included in the replacement figure as recommended by the Examiner.

Please replace Figure 2 with Figure 2 attached herewith. The term "Prior Art" was inadvertently omitted in the original figure. It has been included in the replacement figure as recommended by the Examiner.